



MAGAZINE

PRICE TWOPENCE

JUNE 1956



The *I.C.I. Magazine* is published for the interest of all who work in I.C.I., and its contents are contributed largely by people in I.C.I. It is edited by Sir Richard Keane, Bt., and printed at The Kynoch Press, Birmingham, and is published every month by Imperial Chemical Industries Limited, Imperial Chemical House, Millbank, London, S.W.1. Phone: VICTORIA 4444. The editor is glad to consider articles for publication, and payment will be made for those accepted.

CONTENTS

| | |
|--|-----|
| 'Arcon' and I.C.I., by W. F. Lutyens | 162 |
| One Man and His Job—Drawbench Chargehand | 166 |
| Information Notes No. 121 | 168 |
| Garden Notes, by Philip Harvey | 172 |
| Return to New Zealand, by H. L. Richardson | 174 |
| News in Pictures | 178 |
| I.C.I. News | 184 |
| Italian Adventure, by Judith Baldwin | 189 |

FRONT COVER: *Gathering pipis on a blacksand beach, North Island, New Zealand. The pipi is a kind of clam which once provided a staple diet for the Maoris. Photograph by Brian Brake*

OUR CONTRIBUTORS

JUDITH BALDWIN, who was 20 last month, is the daughter of Dr. A. W. Baldwin of Dyestuffs Division and is a short-hand typist. She has recently been transferred to Pharmaceuticals Division after working in the Biological Department of Dyestuffs Division. Her article is the prizewinning entry in last year's Holiday Article Competition.

W. F. LUTYENS is chairman of the 'Arcon' Development Group. He retired from I.C.I. in 1953 after twelve years as an I.C.I. director, the culmination of an industrial career which began with Brunner, Mond & Co. in 1913.

H. L. RICHARDSON works in the Overseas Department of Central Agricultural Control. He is a second-generation New Zealander, although he left that country many years ago. After working on soil fertility at Rothamsted Experimental Station he spent some years in China as adviser on soils and fertilizers to the Ministry of Agriculture and joined I.C.I. in 1945.

'ARCON' AND I.C.I.

By W. F. Lutyens (formerly I.C.I. development director)

'Arcon'? It stands for architectural consultants; for a building development group sponsored by four independent companies; for new, rapid and unconventional building techniques. Above all, it stands for success, the story of which is here told by the chairman of the Group.

At the end of World War II, eleven years ago, a new word came into being—'Arcon.' Derived from the first syllables of "Architectural Consultants," it is the group name for a number of companies, each one a leader in its own sphere of industry. All are completely independent firms, yet they have become inter-related on the basis of mutual interest and co-operation. The name was first suggested by Edric Neel, a brilliant young architect and one of the early pioneers of the Group.

The present members of the Group are Imperial Chemical Industries Ltd., Taylor Woodrow (Building Exports) Ltd., Stewarts and Lloyds Ltd., and the United Steel Companies Ltd. By a pooling of ideas, experience and resources they have succeeded in their original aim to develop new and interesting methods of rapid building construction.

The 'Arcon' Group had its first opportunity to prove its worth when contracted by the Ministry of Works to take part in their post-war temporary housing programme. Putting its ideas into practice the Group evolved the 'Arcon' Mark V House, considered by many to be the best of its type. There were 2500 parts, made by 145 different manufacturers, in each house. To arrange for each part to combine and fit was a tremendous task, particularly as the work had to be carried out at high speed. But the challenge was met, and in all 41,000 homes were erected. (During the construction the architects set up a special section with the sole function of checking the cumulative effects which a modification of any one component would have all along the line.)

This huge undertaking provided invaluable experience. Consultant architects and industrial firms' own designers learned to work alongside one another and to understand one another's problems. Distributors and erectors discovered new problems involved

in prefabricated construction, in such matters as tolerances, and the control and flow of components from many sources. All of these matters entailed close collaboration and exchange of information.

By the time this project was completed, Britain was concentrating on the export drive. As steel and other materials were being used for export first, the 'Arcon' Group turned its attention to overseas needs. Taylor Woodrow Ltd., an original member of the 'Arcon'

Group, formed a new company—Taylor Woodrow (Building Exports) Ltd.—to market 'Arcon' structures overseas, and I.C.I. companies were appointed to act as selling agents in South Africa, Burma, Sudan and Egypt.

The first prefabricated structure of the new series was the 'Arcon' Tropical Roof. It was known that in many countries of the world there was plenty of material available for making walls but none for permanent roofs. A lightweight roofed structure was needed which would help to keep the interior of the building cool. It would have to be insect-proof and capable of withstanding winds of hurricane force. The 'Arcon' Tropical Roof was evolved to meet these requirements. The principle of this structure is that the building itself, complete with its own ceiling, is protected by a former independently supported roof, spaced above it and overhanging the walls. This allows air to circulate between the roof and ceiling, at the same time shading the windows and walls from the sun's heat.



'ARCON' STORAGE BUILDINGS used as fish and meat markets in St. Vincent, Windward Islands



'ARCON' TROPICAL ROOF erected as a school building at Kuala Lumpur, Malaya

The outer cover is a framework of welded steel tubes clad with corrugated asbestos-cement or aluminium sheets, while the inner insulated ceiling is supported on light alloy members, designed in collaboration with Metals Division. This structure withstands wind loads of up to 100 m.p.h. (An 'Arcon' Tropical Roof fitted to a hospital building in Fiji withstood a hurricane of at least 135 m.p.h. This was the last recorded velocity before the anemometer failed.)

In Africa the 'Arcon' Tropical Roof has been used for housing estates, hospitals, storage buildings, and covered open-air markets. In the Middle East it was

adopted by a large oil company for a big artisan housing estate. In Ceylon and elsewhere many school buildings have been erected on this system. So far, more than 30,000 'Arcon' Tropical Roofing Bays have been sold, and the number and variety of applications continue to increase.

The success of the 'Arcon' Tropical Roof overseas and its wide acceptance by architects and builders quickly stimulated further development by the Group. New designs were evolved for buildings suitable for a wide variety of uses.

The common feature of a large proportion of these

is that they consist of a roof supported on its own columns. Use of local walling is needed to complete the structure, so that although the building may have a framework designed on the most up-to-date principles, traditional craftsmanship still has a part to play, and local architectural styling may be incorporated in the finished building.

Unskilled Labour

The great advantage of 'Arcon' structures is that they can be erected by unskilled labour with the minimum of supervision. Occasionally, however, on the larger jobs an erection supervisor from Taylor Woodrow (Building Exports) Ltd. will fly out to keep an eye on things. He may perhaps call at the port where the components are to be unloaded, supervise the unloading and arrange for transport to the site. There he will train a team of local labour in the technique of erecting the 'Arcon' building, and depart as soon as work is begun.

A typical job was the contract to supply a complete open-air market to the town of Jos in Northern Nigeria. When the Taylor Woodrow man arrived at this hot, humid North African town there was not a single inhabitant who had the slightest experience of erecting steelwork. When he left three weeks later, a team of Nigerians was successfully erecting the new market completely on their own.

He had drilled them first in erecting columns. This meant getting down to really basic fundamentals, such as the difference between straight and crooked. Then they practised roof erection, but at ground level. Three teams competed earnestly for the praise of the patient Englishman, and when he left he was satisfied that they would make a professional job of the market.

Beating the Jungle

Another such contract was for Lobe in the British Cameroons. The 'Arcon' components were floated by raft up the crocodile-infested rivers into the jungle interior. The Taylor Woodrow man went overland. Here again local labour was able to erect the 'Arcon' buildings with the minimum of supervision. Houses were erected and a hospital, as well as a community centre and other buildings.

It has been the same story from Addis Ababa to Chittagong, from Cuba to Morocco. 'Arcon' structures are successful, not only for their relatively low

cost and sturdiness, but also for the fact that design and erection are both so simple that usually no specialist is needed to supervise. 'Arcon' structures have been erected in 96 different countries. In Kuwait they have served to house over 6,000 workers in what is probably the largest prefabricated town in the world. In Baghdad at the 1954 British Trade Fair half the buildings were 'Arcon.'

Recent Developments

More recent introductions include the 'Arcon' Sawtooth Roof building for industrial use (usually known as the "Northlight Roof" in the northern hemisphere); the 'Arcon' Portable Hut, and the 'Arcon' Panel Construction for cladding the walls of dwelling houses, hostels and offices. This last system has been successfully used for dormitory blocks and offices at Kuwait.

More plentiful supplies of raw materials have also enabled greater attention to be paid to the home market. 'Arcon' buildings are now being erected all over Britain. By the end of last year some 300,000 sq. ft. of 'Arcon' Sawtooth Roof buildings had been supplied. There is a notable concentration of these buildings at Bracknell New Town, Berkshire.

New Projects

Work is in hand on a number of other projects, which include structures of up to 100 ft. in span and glazing bar techniques which will be applicable to the so-called curtain walling type of construction, in which the exterior framework of a building is clad with a separate panelled framework of light alloy members. In addition the 'Kynalok' system of roofing and walling in aluminium alloy has been developed in conjunction with Metals Division. This system has already been used for many large buildings, both in this country and overseas.

The 'Arcon' Group is essentially a development organisation. The buildings or components are first designed and taken to the prototype stage. These having been proved, and if necessary modified, the members of the Group contribute their respective products. I.C.I. provides mainly non-ferrous metals, which are chiefly aluminium alloys. Paints and Plastics Divisions also participate in the market. The Group, now over eleven years old, is a remarkable example of successful cooperation between completely independent firms.

DRAWBENCH CHARGEHAND

FIVE years ago John O'Connor had never been inside a tube mill. Like ninety-nine people out of every hundred, he never gave tubes a conscious thought at all—except, perhaps, when a freeze-up reminded him to lag the bathroom pipes.

Nowadays, however, John thinks, talks and takes care of tubes for eight hours out of every twenty-four. During each shift, under his personal supervision, many tons of new tubes start the career which takes them finally into houses and factories, schools and hospitals, farms and fields. For these are copper tubes to carry water and gas, made in many different sizes, thicknesses and lengths at Metals Division's new factory at Kirkby, Liverpool.

How quickly John adapted himself to his new duties can be gauged from his position today—that of shift chargehand on No. 1 drawbench. Not, perhaps, an inspiring title, until you remember that "No. 1," stretching for nearly a hundred yards down Kirkby's main mill, is the largest triple drawbench in the world.

John explained to me that all Kirkby tubes which can be mass produced pass three or four times through the dies of No. 1 bench. "What happens is this. The solid cast billets are pierced or extruded to make what we call shells. These are really short tubes with very thick walls. Our job is to break them down—that is, draw them out so that they finish up much longer and thinner. For instance, billets weighing 450 lb. make shells about 30 ft. long and 4 in. across. We give them three passes, and they end up 110 ft. long and 2 in. in diameter. After that they go on to the other drawbenches for more of the same treatment."

All this sounded delightfully simple, and I was not surprised to find that there is more to the job than John's casual words suggested. Of course, neither he nor his machine work single-handed. A crew of seven or eight (the official record imaginatively gives the figure as $7\frac{1}{2}$) is on duty each shift, but only two of them, the operator and his assistant, are needed to man the 1000 h.p. drawing machine. "The others," John reeled off glibly, "are a

pointer, a sawyer, a slinger, a crane driver and a checker."

The die, of course, is the heart of the drawbench, for it is this which controls the gradual reduction of the tube's girth, while a plug or mandrel fitted into the tube controls the inside diameter. One of John's most important jobs, then, is to check the size and settings of the dies and plugs—no small task with six plugs and three dies in use simultaneously.

The shells are lifted by crane on to the "in" end of the drawbench and fed, three at a time, to the dies. A swiftly moving "wagon" grips the pointed nose of the tubes and pulls them through to the second runway. They roll down into a trough, where in due course they are wrapped round by slings and carried away by the crane for another pass. Last of all, they are cut to length by the sawyer—a deceptively simple-looking job which could, I suppose, easily wreck all the good work put in so far!

It might sound from all this as though the chargehand's job is to follow the tubes on their journey from machine to machine, making sure that each operation is carried out satisfactorily. John's job is, in fact, much more exacting than this, for the whole sequence of operations is virtually non-stop, and synchronisation is made difficult by the varying pace of the machines. The pointing and sawing machines take only one tube at a time, the drawbench three at a time; and nobody can do anything at all until the crane driver delivers the goods. The various operations must be geared so that nobody is kept waiting for work, and so that there is time to check the condition of the machines, service them, and change the tools as necessary.

John O'Connor manages to be in five places at once without hurrying and to supervise the work of his crew without harrying. He is quite unawed by the knowledge that, for part of every day, he is responsible for $7\frac{1}{2}$ men and plant and material worth many thousands of pounds. "Oh," he says, "there's nothing to it, really."

D.B.T.

John O'Connor



Information Notes

'TERYLENE' PROGRESS REPORT

By A. R. Milne (Commercial Director, Fibres Division)

'Terylene' is forging ahead. In Europe five companies—in France, Germany (2), Holland and Italy—are manufacturing under exclusive rights. At home manufacturing capacity will soon jump from 11,000,000 lb. to 22,000,000 lb. a year. Here is a survey of the many uses in which 'Terylene' is proving successful.

A YEAR of commercial-scale 'Terylene' production is now well behind us. With an even wider distribution of 'Terylene' in progress comes the news that the second unit of the 'Terylene' Plant is virtually complete, and its capacity is to increase from eleven million to twenty-two million pounds a year.

The role of the pioneer plant at Hillhouse has changed from one of production to important new development work. This plant, from which all the early filament yarn and staple fibre came, maintained its output until June of last year and recently became part of Research Department. Today, with a selected group of skilled operatives, it is making a valuable contribution towards development.

'Terylene' Overseas

September of last year saw the official opening of the 'Terylene' plant of Canadian Industries Ltd. at Millhaven, Ontario. Described as the finest plant in Canada and situated on the shores of Lake Ontario, it has already begun the climb towards its output of 11 million pounds for which it was built.

In Europe five firms have been granted exclusive rights to manufacture polyester fibre in their own countries. They are Société Rhodiaceta in France, whose product is called 'Tergal'; Farbwerke Hoechst A.G. ('Trevira') and Vereinigte Glanzstoff-Fabriken A.G. ('Diolen') in Western Germany; Algemene Kunstzijde Unie ('Terlenka') in Holland, and Montecatini ('Terital') in Italy.

At last year's Brussels textile fair there was real evidence that progress has been made in developing the manufacture of polyester fibre abroad, because three of the licensees exhibited merchandise there.

In addition, 'Terylene,' not only in yarn and fibre form

but also as British-made piece goods, is being exported in considerable quantities to Commonwealth countries, where the name 'Terylene' is rapidly becoming established.

Local production of 'Terylene' fabrics is also beginning in Australia, New Zealand and South Africa, while experimental work is being undertaken in other Commonwealth countries which are less developed industrially, such as India. European countries, other than those where licences have been granted, are making a wide range of industrial and clothing products which incorporate 'Terylene,' ranging from fishing lines to men's trousers.

The world-wide publicity given to the name 'Terylene' has proved a major factor in interesting the overseas buyer in our products, and although development in overseas markets is some two to three years behind the United Kingdom, it is taking place on such a wide basis that there are good reasons for believing that 'Terylene' articles will eventually be as easily obtainable abroad as at home.

Men's and Women's Wear at Home

Blends of at least 50% of 'Terylene' with wool were first introduced on to the market in the form of ladies' pleated skirts. Last year this development progressed to such an extent that these new skirts were available in most ladies' clothing stores throughout the whole country. Their promotion was such a success that approximately one million were bought. The original ranges of greys and fawns were added to by many manufacturers with gayer check patterns and traditional tartan designs.

The introduction of washable pleated skirts was followed quickly by ladies' two-piece suits made from similar cloths and by the first men's sports trousers. The promotion of sports trousers, many of worsted-type blends

of 55% 'Terylene' and 45% wool, is now under way on a very large scale, and it is supported by a considerable amount of merchandise already in the shops. The trousers wear longer and look smarter, quickly shed their wrinkles caused through packing and everyday wear, and really do keep their original tailor-made creases even if they become wet.

Heavier-weight cloths began to be featured last autumn for the first men's suits. We can now expect this use to be distributed more widely this year to make 'Terylene'/wool suits available in most big shopping centres soon.

A more recent development, but one which has not yet been seen commercially, is cotton-type 'Terylene' staple fabrics. These will be introduced containing two-thirds 'Terylene,' and they will be similar in pattern and handle to conventional poplins. Used mainly for shirts, blouses, dresses, lightweight suits and overalls, they will wear extremely well, dry quickly and need very little ironing.

From 'Terylene' filament yarn several important apparel uses are already well established. These include ties which do not crease in wear, keep their shape, and can be washed without needing to be pressed. The natural warm handle of 'Terylene' is particularly noticeable in lingerie and nightdresses, which, like summer dresses, blouses, and babies' and children's wear, are becoming more easily obtainable. Clothes made from 'Terylene' filament yarn dry extremely quickly, do not shrink, and need the minimum of ironing.

The low-stretch quality of 'Terylene' is important because it means that the garments in which it is used do not stretch out of shape easily. This is a big sales point with foundation garments, for which 'Terylene' is also being used.

Many Uses for Industry

A number of important developments in the industrial use of 'Terylene' have taken place during the last two years, and although many people associate the fibre with new advantages for clothes and furnishings, it is hoped that eventually about half the total output of 'Terylene' will be absorbed by industry.

'Terylene' has a great deal to offer in many applications, for it is just as strong wet as when dry, it extends very



... a selected group ...

little, and has excellent heat and chemical resistance. In addition, it absorbs little moisture, strongly withstands abrasion and rotting, and has good insulation properties.

Among the industrial uses already developed are hoses of all kinds, which have been ordered in large quantities by government departments, by H.M. Services, and for other defence requirements, and which are widely used in Canada for forest fire fighting. Hose reinforced with 'Terylene' has been found to be lighter, more pliable and easier to handle than conventional rubber-lined hose, and because 'Terylene' has a low-stretch quality it does not increase its length or diameter when under high pressure.

A number of paper mills are already using dry-end felts made from 'Terylene' because of the fibre's excellent resistance to heat, which brings about considerable economy. Filter cloths, dye-bags and industrial clothing too are important uses, for 'Terylene' has better all-round resistance to chemicals than most other fibres. As well as offering longer life, these articles represent a great deal of economy by lessening the shutdown and stoppage in

production caused by the time taken to replace conventional articles.

Already developed commercially are hatch and deck covers, sails, fishing nets and lines, ropes and cords, and electrical sheets and tapes. In addition, 'Terylene' is well established in the field of laundry clothing, and many modern high-speed laundries in Britain have found that employing such articles as calender clothing,



... the first men's suits ...

packing flannel and press covers made from 'Terylene' reduces their operating costs considerably.

'Terylene' for Curtains

You can also already buy 'Terylene' curtain net and marquisette in most shops. These fabrics make up into delightful curtaining, and they are assured of an extremely long life because they are hardly affected at all by sunlight and no amount of washing will weaken them.

Quite recently pillows and quilts filled with 'Terylene' were introduced on to the market. They represent two other important domestic uses, bringing outstanding advantages to our furnishings and household articles. The pillows and quilts are extremely light and soft, and their prices compare favourably with those articles filled with more conventional materials.

THE ANNUAL REPORT

Last year the Company's gross consolidated sales again reached a new high level—£411,000,000 as against £352,000,000 in 1954. The Annual Report gives a breakdown of this figure, showing the cost of producing and selling these goods and what was done with the surplus. This and other extracts from the Report are printed below.

THE gross proceeds from operating activities and income from investments, etc., and the manner in which those proceeds were utilised are shown in the following table:

| IMPERIAL CHEMICAL INDUSTRIES LTD. AND SUBSIDIARIES | | | |
|--|-------------|-------------|--|
| | 1954 £m. | 1955 £m. | |
| Gross manufacturing and trading proceeds and gross income from investments, etc. | 357.1 | 416 | |
| Raw materials for production and maintenance, purchases for resale, and all payments for external services, excluding all wages and salaries | 207.7 | 243.2 | |
| Wages and salaries | 77.0 | 89.4 | |
| Pensions and contributions to Pension Funds | 5.4 | 6.6 | |
| Depreciation of plants | 16.6 | 20.4 | |
| Employees' Profit Sharing Bonus | 2.7 | 2.8 | |
| United Kingdom and overseas taxation | 21.2 | 23.9 | |
| Retained as reserves for employment in the business | 16.8 | 19.5 | |
| Distributed as net dividends to stockholders | 9.7 | 10.2 | |
| | £m. 357.1 | £m. 416 | |

Review of Operations

The value and volume of the Company's sales were both new records. The value of the whole Group's consolidated sales in 1955 was £411m. (including £42.8m.

in respect of the Company's Canadian subsidiaries, for which only six months' sales were included in the consolidated sales figures for 1954) compared with £352m. in 1954.

The high level of industrial activity at home increased the demand for the Company's products, and this coupled with the Company's increased manufacturing capacity led to record sales in the home market. The value of exports from this country was also higher than ever before, and rose from £67.5m. in 1954 to £71.1m. in 1955.

The Company did its best to absorb increased costs caused by increases in wages, in freight, and in the price of fuel; but it was not possible in all cases to avoid price increases, although for some products, for example 'Terylene,' titanium, and certain organic chemicals, the Company was able to reduce prices.

Expenditure on the Company's construction programme (including replacement of old plants and the purchase of Government assets) in 1955 amounted to £33m., making a total expenditure up to the end of that year of £223m. on new fixed assets since the end of the war.

Economy in fuel consumption and the efficient use of steam and electric power have always been an important aim in the design and operation of the Company's factories. The Company consumes more than 4.5 million tons of coal a year and over a million tons of coke; 250,000 tons of oil are also used for process and heating purposes. Steady progress has been made in replacing the older and less efficient boilers, and a third of the steam output now comes from the boilers which are less than five years old, and three-quarters of the steam is raised at pressures exceeding 600 lb. per square inch. Two of the latest boilers which have been ordered will each produce more than 500,000 lb. of steam an hour at a pressure of 1600 lb. per square inch and a temperature of 1065° F. The Company generates 70% of its electricity requirements, and much of the high-pressure steam,

before it is passed to process use, is employed to generate electrical or mechanical power.

Research and Development

Total expenditure on research and development amounted in 1955 to £9.44m., which, after allowing for increased costs, represents an expansion of about 8% in the actual volume of work compared with 1954.

So long as the magnitude and scope of the Company's manufacturing activities continue to increase, this expansion of all branches of research and development is essential. Experience shows that chemical processes hardly ever reach such a stage of perfection that further research cannot give rise to improvements which amply repay the effort and which are necessary to maintain a competitive position. To give one example, although ammonia has been one of the Company's major products for nearly thirty years, a great deal of research and development work is still in progress to discover more efficient catalysts, and to find methods of producing hydrogen (which is one of the materials for the production of ammonia) more economically from fuel oil than is now possible from coke.

| Year | Output | | Total Wages and Salaries | | Wages and Salaries per Unit of Output | |
|------|--------------|--------|--------------------------|--------|---------------------------------------|--------|
| | All Industry | I.C.I. | All Industry | I.C.I. | All Industry | I.C.I. |
| 1948 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1949 | 106 | 103 | 107 | 108 | 101 | 105 |
| 1950 | 114 | 127 | 112 | 118 | 98 | 93 |
| 1951 | 117 | 142 | 125 | 137 | 107 | 96 |
| 1952 | 114 | 129 | 134 | 149 | 118 | 116 |
| 1953 | 121 | 146 | 144 | 154 | 119 | 105 |
| 1954 | 129 | 173 | 156 | 173 | 121 | 100 |
| 1955 | 136* | 195 | † | 193 | † | 99 |

* Provisional.

† Not available.

Personnel

At the end of 1955 the Company's employees in the United Kingdom numbered 115,306 (including 1697 employed in Government agency factories), of whom 89,045 were men and boys and 26,261 were women and girls. This was an increase of 3306 over the number employed at the end of 1954.

Although recruitment of operatives was not easy, no serious difficulties were encountered except that in many parts of the Company it was not possible to recruit all the tradesmen that were needed. In consequence of the general shortage, overtime working throughout the

Company was higher than usual, averaging 10% for men.

In August 1955 the Treasury published figures relating to labour costs in different sectors of industry which showed the extent to which money incomes were rising faster than output, thus causing costs and prices to rise. The latest published figures relating to all industry (taking 1948 as the base year) together with the corresponding figures for the Company (excluding Metals Division) are tabulated below. In interpreting these figures it should be recognised that the output index varies owing to a number of factors, for example changes in the composition of the Company's products.

The Company is proud of the long service of its employees of all grades, and at the end of 1955 there were in its service in the United Kingdom:

41 people with over 50 years' service
1890 people with over 40 years' service
8333 people with over 30 years' service
22,685 people with over 20 years' service

Under the Profit Sharing Scheme 81,224 employees qualified in 1955 for bonus payable in respect of the year 1954, and the total bonus payable amounted to £2,691,390,

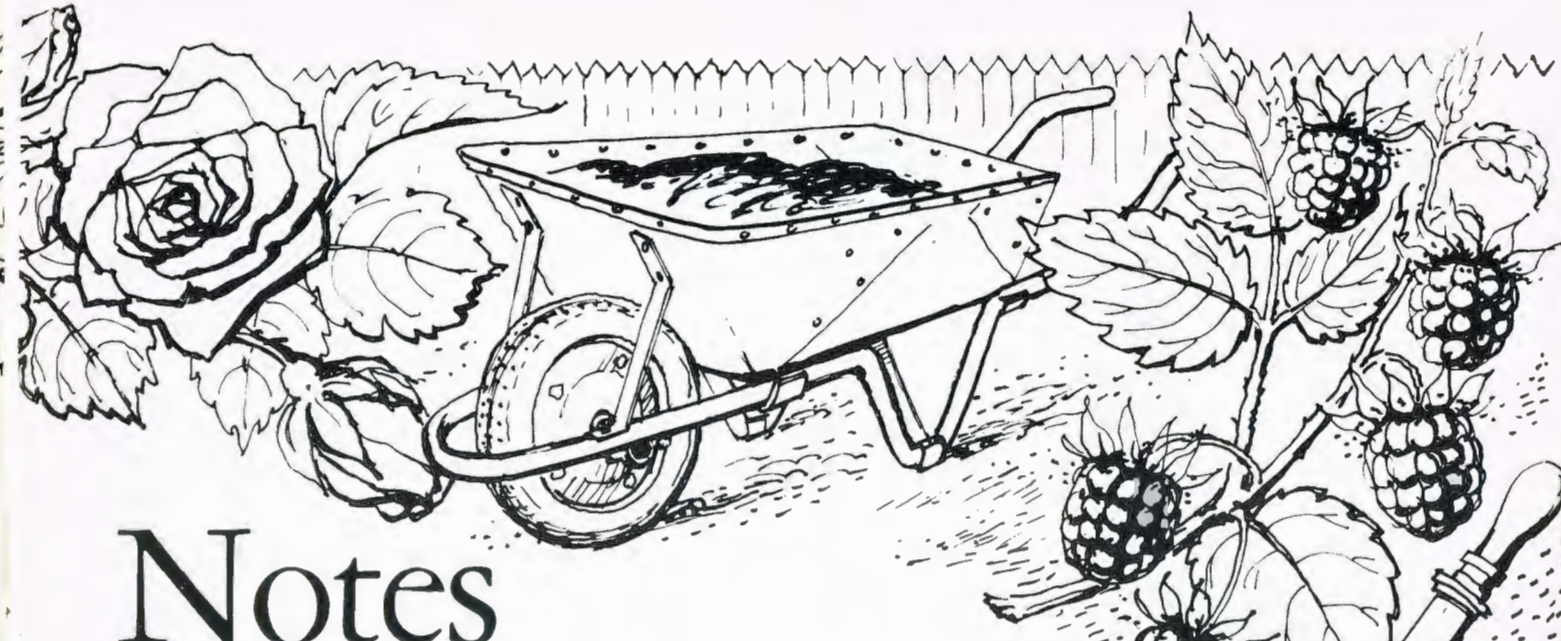
an average of £33 2s. 8d. per head. After deduction of personal income tax, the net amount of bonus paid to the trustees of the scheme in July 1955 was £2,047,125, an average of £25 4s. 1d. per head. The number of ordinary shares of £1 each issued in accordance with the terms of the scheme was 743,426.

The important matter of accident prevention continued to receive the closest attention, and for the whole year for the first time in the Company's history the accident rate was less than one lost time accident per 100,000 man hours, which is a particularly low figure for a heavy industry.



Garden Notes

By Philip Harvey



Illustrated by Sheila Waters

Do gardeners generally go to sufficient trouble to convert waste material such as annual weeds, dead flowers, etc., into compost? Much has been written about the virtues of compost, and the beginner could easily assume that plenty of properly made compost provided sufficient nutriment for most plants as well as keeping them largely free from pest and disease attacks.

Compost may be defined as decayed organic matter. It is accordingly a highly valuable source of humus. While humus undoubtedly supplies some essential plant foods, its main value probably lies in improving the mechanical condition of the soil. Light, sandy land becomes more retentive of moisture, whereas heavy clay is gradually opened up so that air and moisture can penetrate more readily.

Roses, shrubs and herbaceous perennials are often given a 2-3 in. mulch of compost in dry summer weather. Provided you wait until late spring, when the soil has really warmed up and all weeds have been removed, a mulch of any kind will help to conserve moisture. There is, however, no scientific evidence to suggest that compost as such confers any marked resistance to disease. I have never been able to keep my roses free from disease merely by mulching or feeding with compost, peat and similar humus-forming materials.

A wide range of materials can be used for composting. All vegetable matter, unless woody in texture or infected with virus

disease or club root, is suitable. Potatoes and tomatoes infected with blight are safe for composting.

The expression "all vegetable matter" should be clear, but I find that many gardeners are conservative in their choice of materials. Beet and carrot tops, lettuces that have run to seed, vegetable peelings, etc., are often overlooked. Evergreen leaves are best burnt, as they take a long while to decompose, similarly most hard woody stems, including the roots of perennial weeds like docks and dandelions.

The right position for a compost heap is tremendously important. For some unaccountable reason textbooks pay relatively little attention to this point, but if you site your heap in a dry, sunny position, failure—or at any rate partial failure—is certain. The various materials will to a large extent (especially in a hot summer) wither or dry up.

Slight and preferably half shade is essential. At all costs avoid a site where drying east winds sweep unimpeded across your garden. Some authorities insist on a firm base, but I do not find this essential. In my experience the important point is to start your heap an inch or two below soil level to reduce the likelihood of it drying out at the base.

Over-large compost heaps are undesirable, because air and moisture may be unable to reach the inner portions. They are also awkward to turn over and water. A height

of 4-5 ft. is best, but you can allow about 1 ft. more for the width. Give each 6-9 in. layer of material a light dusting of sulphate of ammonia or 'Nitro-Chalk' to accelerate decomposition. A final covering of earth will prevent the heap becoming sodden after heavy rains.

Never let the heap dry out, but water freely when at all dry. If the materials are largely annual weeds, lawn mowings and other soft garden waste, drying out is less likely. Do not pack the material tightly, otherwise decomposition will be slow. Large quantities of lawn mowings should always be well mixed with other materials, as when composted on their own they can easily become a sodden, tightly packed mess which remains only half decayed. Any large pieces of material such as cabbage stumps must be cut into short lengths with a spade. Turn over your compost heap from time to time to ensure uniform decomposition. The outer portions of the heap which have been exposed to the air should be transferred to the middle.

Really there is no excuse for maggoty raspberries, as the raspberry beetle is a very easy pest to master. The adult beetles emerge in May and feed on unopened flower buds. The eggs are subsequently laid in the open blossoms during June and July, hatching in about ten days. The beetle larvae feed on the outer surface of the fruits, later tunnelling into the berries, including the "plug." Derris is a highly effective remedy,

and you can apply 'Abol' Liquid Derris Insecticide when the first fruits turn pink.

Keep a careful watch for any signs of reversion on your black currants. Also known as nettlehead or nettleleaf, this trouble is a virus disorder which is confined almost entirely to black currants—red and white varieties are rarely infected.

Leaves of "reverted" bushes are narrower, smaller and less serrated than those of healthy specimens. They are also darker in colour. The flowers are often maroon or claret compared with the normal pale lavender. They frequently drop off, and consequently the fruits fail to form.

Black currants may revert branch by branch, producing side shoots with pointed narrow leaves, suggesting a clump of nettles. If you examine a healthy leaf in June you will observe five or more veins spreading from the mid-rib; a leaf from a "reverted" bush has only four veins and is less serrated at the edges.

There is no known cure for reversion. Diseased bushes must be dug up and burnt. It is not sufficient to cut out isolated branches which have "reverted," because the trouble will eventually appear on other branches. Never take cuttings from infected bushes.

The virus is transmitted by the "big bud" mite, and spraying with 'Spersul' or lime-sulphur at the "grape" stage, i.e. when the flower clusters are visible but before they actually open, will keep down this pest.



Sheila Waters



Return to New Zealand

By H. L. Richardson (Central Agricultural Control)

How is it that New Zealanders can produce butter and meat so economically? There are, perhaps, four chief answers—a mild climate, plenty of fertilizers, applied science and hard work. Here is the impact of this progress on a New Zealander returning to his own country after twelve years' absence.

Photographs by Brian Brake

EARLY this winter (which, of course, is summer over there) I visited my native New Zealand for the first time after an absence of twelve years. Because I was making a study of farming methods and fertilizer use I carried away few new impressions of town life: the outstanding one was that of the growth of the cities, even since 1944, and their spread into the countryside.

New Zealanders like to have their own house and garden; even if it is no more than a cottage or a shack, the house must stand in its own section of land. There is little enthusiasm for flats and none at all for semi-detached houses or long terraces of conjoined dwellings. Consequently the extent of urban sprawl is astonishing in relation to the size of the population. Auckland, the largest city, has only about 300,000

people, yet its suburbs stretch roughly half as far as those of London. In 1955 Auckland's tentacles were reaching far out along the coasts to what had seemed remote and isolated bays, charmingly surrounded by bush, in 1944. The result, however, is a happy outdoor life, with gardening, swimming, sailing or fishing at week-ends for a large proportion of the office dwellers and shop workers in the towns, so one cannot be too critical.



The countryside at first sight appeared much the same as of old, although the newly painted, prosperous appearance of the farmhouses was striking. As time passed, however, two impressions became insistent: that there were more sheep or cows in a paddock, and that the hills were greener than they used to be. These impressions were not merely a result of the happy glow that one feels



A TYPICAL SHEEP STATION in the Mackenzie country of the South Island. In the distance are the Southern Alps rising to 12,000 ft., the schooling ground of the conqueror of Everest, Sir Edmund Hillary.

on returning to one's homeland: they were factual, outward signs of profound agricultural improvements based primarily on the use of fertilizers.

The carrying capacity of New Zealand pastures for livestock is much higher than it was when I was a boy: on the best land eight to twelve sheep per acre, or else one or two cows, are now being carried all the year round; and even on what used to be poor hill land that would barely take a sheep to the acre three or four sheep per acre are now found.

This improvement, as well as the greener colour of the hills, is based on phosphate and clovers. There has been liberal fertilizing with superphosphate, supplemented by trace elements like molybdenum where needed—and sometimes the response to an ounce or so of molybdenum per acre is most dramatic,

making all the difference between a thin, wiry starvation pasture and one that is heavy, dark green, lush and nutritious. Liming, and sowing with improved herbage varieties, are carried out where desirable; nitrogenous and potassic fertilizers are also being introduced, the nitrogen mainly to give an "early bite." In addition, of course, there has been better weed and herbage control, while the livestock have been selected and improved, and the best farmers practise highly intelligent farm management. Yet none of these things could have done lasting good unless the nutrient deficiencies of the soils had first been made good.

Aerial top-dressing is, so to speak, the brush that has painted the steep hills green. Last year scores of specially equipped small aeroplanes were employed,



THE CREAM OF NEW ZEALAND PASTURE, in the Taranaki district of North Island. Rainfall is high, and stocking of as much as one cow to the acre is not uncommon. In the distance is Mt. Egmont (8000 ft.).

working at high pressure, to apply a total of nearly 300,000 tons of fertilizer to some three million acres of hilly land. Much of this land is so steep or inaccessible that it would never have received fertilizers in the normal way.

Aerial top-dressing is only one of several new techniques—some requiring heavy agricultural machinery—that are being used to reclaim land previously abandoned or regarded as too steep or poor for farming. Thus scrubland and second-growth forest are being converted to productive grassland, on the scale of over 100,000 acres annually.

It is good to be able to report that I.C.I.(N.Z.) has played a leading part in many of the new developments: for example, in the introduction of selective herbicides, which have made the control of noxious weeds much more effective; in the supply of compounds of molybdenum, copper, cobalt and boron required for trace-element treatments; and in the recent reintroduction, on a firm basis of trial and experience, of nitrogenous fertilizers for grassland.

Pre-war attempts to use nitrogen on grassland had led to disappointment because of trouble with clovers, but better methods of management suited to local conditions are now being adopted by progressive farmers. The Waikato Nitrogen Conference, organised by I.C.I.(N.Z.) in 1953, was a landmark in the introduction of these methods.

A fact about New Zealand not always realised elsewhere is that out of the 66 million acres of land that comprise the total area of the country only 43 million acres are occupied for farming, and most of this is too hilly and rough for intensive management. Less than 8 million acres have ever been brought under the plough, and 6½ million of these acres have been sown down to grass again. The area of arable crops, including fodder crops and horticulture, is less than 1½ million acres, while that of grassland, improved and unimproved, is about 31 million acres. Indeed, grass is the main crop, and animal products are the staff of economic life, in New Zealand.

The steeper hill country in both islands is mainly



BOILING THE BILLY for tea in the high country of the Southern Alps. In the summer sheep will graze right up to the snowline. In the autumn they are mustered by herdsmen on horseback and brought down to the valley.

used for sheep, providing wool or mutton for export, along with a few beef cattle. A famous sheep station in the South Island is Mesopotamia, where Samuel Butler made a small fortune out of wool before returning to England to devote himself to writing. Near this was the original site of Erewhon, "over the ranges," an isolated valley the approach to which Butler described in faithful detail in the opening chapter of his famous book. Not far away is the Mackenzie country, tussock grassland, famous for extensive sheep-raising, and named after an enterprising sheep-stealer who drove a large flock over an unexplored pass into this secret valley as long ago as 1855.

The gentler hill country and the fertile flats in the South Island are principally used for raising the fat lambs that end up as Canterbury lamb in English butchers' shops. Most of the dairying, along with some fat-lamb raising, is done in the North Island, which ships large quantities of butter, cheese, dried milk and casein powder to Britain and other overseas markets. Most of the small amount of wheat harvested is grown on the Canterbury plains, where large quantities of grass seed are also produced.

Intensive orcharding—apples and pears, peaches, plums, apricots and small fruits—is found in several localities in both islands.

NEWS IN PICTURES



The Queen and the Duke of Edinburgh visited the I.C.I. stand in the Chemical Section during their tour of the British Industries Fair at Olympia last month. In the photograph

above Mr. E. M. Fraser (I.C.I. Sales Controller) (on left) interests Her Majesty the Queen in I.C.I.'s new metal product titanium. Sir Ernest Goodale (chairman of the B.I.F.) looks on



Jealott's Hill was also visited by the Duke in April. Above: the Duke watches Mr. A. Sarney measure phosphorus content of tomato plant. Others are Mr. S. Cheveley, Dr. W. R. Boon,

Mr. A. J. Low and Sir Alexander Fleck. Below, left: The Duke is met on arrival by the Chairman. In background are Mr. A. J. Quig, Lt. Cdr. Michael Parker and Mr. S. Cheveley



The Design Centre was officially opened by the Duke of Edinburgh on 26th April. Also in the photograph are the director of the Council of Industrial Design, Sir Gordon Russell (on left), and Mr. W. J. Worboys, I.C.I. Commercial Director and chairman of the Council of Industrial Design



Wilton panorama. The above photograph, which appears in the Annual Report, shows some of the latest developments on the Wilton site. So far just over one-quarter of the area has been developed, and fifteen plants are already in operation



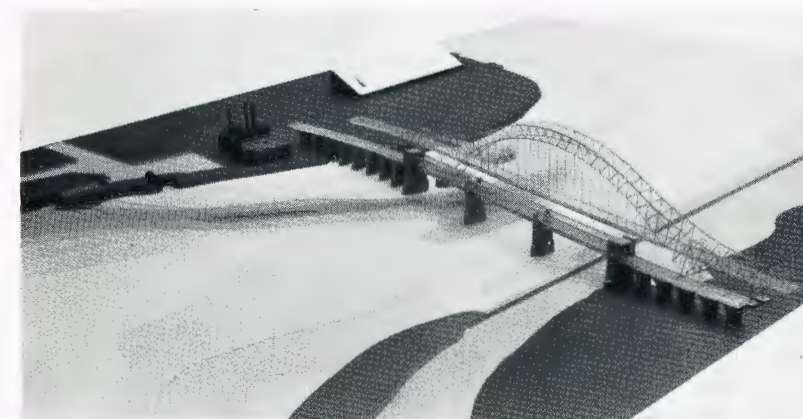
Mr. C. Paine (I.C.I. Development Director), president of the Society of Dyers and Colourists, at Society's dinner with Alderman R. S. Harker (Deputy Mayor of Manchester), Right Hon. G. B. Hanna (Minister of Finance for N. Ireland) and Mr. A. H. Brewin (Prime Warden of Worshipful Company of Dyers of City of London)



The silver trophy photographed above is to be presented this month to the Welsh Fly Fishing Association by Plastics Division. Called the 'Luron' 2 shield, it records the Division's manufacture of nylon monofilament fishing line



Students from the Textile College at Tilbury, Holland, toured Dyestuffs Division H.Q. and Huddersfield Works during their recent visit to England. Above: Mr. W. Sutcliffe (Standardising Dept.) holds the visitor's attention



Scale model of River Mersey at Runcorn Gap, showing I.C.I.'s West Bank power station, exhibited at House of Lords in connection with Runcorn-Widnes Bridge Bill, was presented to the Runcorn Arts and Crafts Museum



A new development in the use of plastic film in market gardening is the introduction of black 'Visqueen' film. It is shown above used experimentally with lettuces. The film is perforated to allow penetration by rain-water, its black colour discourages the growth of weeds, and the soil temperature is raised



"Pajama Game" outfits provided the finale to the 'Ardil' fashion show held at Nobel Division. Three models were from Nobel Division staff and two from the Regional Sales Office



Lake fishermen in East Africa examine one of the very fine 'Terylene' gill nets which have boosted catches. In the clear lake waters the nets, because of their fineness, are far less visible



Rugby football. An I.C.I. team drawn from Alkali, Billingham, Fibres and Metals Divisions and Northern Region played Harrogate R.U.F.C. at Harrogate on 25th April. Believed to be first-ever representative I.C.I. team to be formed, side included D. R. Allison (Metals Division), the England full-back



A blackbird's nest on a can of 'Dulux' Eggshell Finish sounds too incredible to be true, but that is just what happened on the premises of A. J. Simmons & Sons (Seaford) Ltd., where the nest (above) was found in an out-of-the-way corner



Artist's impression of the proposed new I.C.I.A.N.Z. headquarters at Melbourne. Nineteen storeys high and rising 265 ft. to the top of the lift tower, it will be Australia's tallest office building. It is scheduled for completion in mid-1958



Mr. J. W. McIvor (right) with Lord Lawson of Beamish, Lord Lieutenant of Durham, and Mr. W. J. V. Ward (chairman of Billingham Division) after receiving the British Empire Medal



Chain of office for the chairman of Eston Urban District Council, donated by local industries including I.C.I. Wilton



The Bishop of Chester, Dr. Gerald Ellison, in Winsford Rock Mine as part of plan to tour all large Cheshire industrial concerns. The Bishop tried his hand at drilling



Synthonia Club's new quarter-mile running track has been certified for accuracy by the A.A.A. When enclosed the track will probably be used for many big sports meetings. Planning permission has been granted for the erection of a grandstand

THE CHAIRMAN'S FORTY YEARS' SERVICE

Mr. Chambers spoke of the incentives to long service. Most people, he felt, did good loyal work because it was in their nature to do so. Nevertheless material incentives, such as profit-sharing and opportunities for promotion, not unnaturally played an important part. But the Chairman, he said, enjoyed no such incentives: his was a dead-end or blind alley occupation! He could expect no promotion; he could get no further; yet he continued to give invaluable service. This presentation ceremony, said Mr. Chambers, was an occasion when we could say thank you

The Chairman then presented awards to his fellow directors on the Board, Mr. Worboys and Mr. Scott, and to forty-nine members of Head Office staff who had qualified over the past year. The latter included the I.C.I. Secretary, Mr. R. A. Lynex (20 years).



Mr. Chambers makes the presentation to the Chairman

From Jealott's Hill His Royal Highness went on to visit

I.C.I. products, notably those of Leathercloth Division, are also on exhibit in London at the Design Centre in the Haymarket, newly opened by the Council of Industrial

Design, whose chairman is Mr. W. J. Worboys, I.C.I. Commercial Director. The success of the Design Centre has greatly exceeded expectations, and over 5000 people per day are visiting it.

BILLINGHAM DIVISION

Billingham Synthonia v. Bishop Auckland

Billingham Synthonia soccer team were at home to Bishop Auckland, this year's F.A. Amateur Cup winners, in the last Northern League game of the season on 2nd May. After having most of the play in the first half and the opening stages of the second, the home side were



Billingham Synthonia v. Bishop Auckland

beaten 4-2. The Bishop Auckland side included seven players who appeared in the final at Wembley or the replay at Middlesbrough, among them Benny Edwards, a draughtsman in Chief Engineer's Department at Billingham.

DYESTUFFS DIVISION

Junior Champion

The Patterson family must indeed be a formidable one, for 15-year-old Bill Patterson, who is employed as a laboratory boy in Blackley Works Analytical Department, is the eldest of three brothers, all of whom are keen boxers.



Bill Paterson

Bill began boxing when he was 9; he joined the Lion Boxing Club in Collyhurst, Manchester, and for three years concentrated on training work, road work and sparring, since he was too young to enter the competitive ring.

When he was 12, however, he had his first fight, and since then he has had seven fights, in five of which he has been successful. This

year he won the Class A Junior (8 stone) title in the Manchester Youth Boxing Championships held at Belle Vue; he won the final on points. He says this was by far his hardest fight to date.

Although Bill Patterson is as keen as ever on the sport he has no ideas of turning professional. His other week-night activities include P.T. classes and the Manchester Regiment of the Army Cadets.

GENERAL CHEMICALS DIVISION

More about Works Councils

The suggestion in the April *Magazine* that Mr. Harry Taylor's contribution to the Works Council Scheme was a record has brought a swift reply. Mr. Joe Heyes, Labour Officer at Pilkington-Sullivan Works from 1928 to 1954, now living in retirement at Runcorn, writes:

"Attendance at 312 out of a possible 321 Works Council meetings is certainly an excellent achievement, and I doubt if any other Division can better it. But it is not a record for General Chemicals Division—at least, not on a percentage basis. I heard Lord Melchett's address at the inaugural meeting at Imperial Chemical House, and in my capacity as secretary, I attended 301 out of a possible 304 meetings of Pilkington-Sullivan Works Council. Further, I was present at every single meeting of the Division Council—from the first held at Weston Point in July 1929 to what was the final one for me at Blackpool in April 1954."

Aluminium—Ten Tons a Year to Two Million

In 1889 the first ingots of aluminium made by the Castner-Deville process were produced at Oldbury, and to celebrate the event all shareholders in the Aluminium Company received a medal cast from the metal. Recently



The 1889 Aluminium Medallion

the Division has come into possession of one of these medals, presented to them by Mr. F. J. Salkeld, lately retired from Chief Engineer's Department. It will be suitably mounted and placed in the Division boardroom.

The high cost of sodium set strict limits to the Deville process for producing aluminium, invented in 1855. Indeed, during 1885 world output of the metal was less than ten tons. However, H. Y. Castner's new process, which made sodium for less than 1s. a pound, changed the situation, and between 1888 and 1891 one hundred and

three tons of aluminium were produced, the first important manufacture of a metal now having an annual world output of over two million tons. The process itself ceased to operate in 1891, having been superseded by the electrolytic method invented by Hall and Heroult.

METALS DIVISION

Division Director Retires

On 26th April, Metals Division said farewell to Mr. J. B. Nevitt, who joined the I.C.I. Research Department on demobilisation after the 1914-18 war after completing



Dr. Beeching presents Mr. Nevitt with a retiring gift

a university degree course. He was transferred to Ammunition Production Department nearly thirty years ago, and has been Director in charge of Ammunition and Metal Fabrication Departments since 1942.

Mr. Nevitt is well known in the shooting world: he shot for many years at Bisley, was a member of the English team in the Elcho match, and is a member of the English Eight Club. A keen amateur photographer, Mr. Nevitt has also achieved many successes in this field.

Apprentices Share Award

Two Witton apprentices recently volunteered to take part in the television quiz "Hit the Limit" and agreed that if only one was selected, any winnings would be shared between them. Neil Beaumont was chosen, and won the jackpot question by naming Kettering as the "odd town" from a list of seven, the other six being county towns. The lucky pal who shares the £150 award is Brian Hesketh. Both apprentices are part-time students at the Birmingham College of Technology.

PLASTICS DIVISION

'Alkathene' Hits the Headlines

It's light! It's bright! It's made from 'Alkathene'!—this is the slogan for the nation-wide advertising campaign

for kitchen goods made from I.C.I. polythene which was launched by Plastics Division on 23rd May.

'Alkathene' advertisements are now appearing in the national papers; in the form of filmlets in the cinema; and in many popular magazines, including *Picture Post*, *Radio Times*, *Good Housekeeping* and *Woman*. Readership of the magazines alone is estimated at over 26,000,000. The aim of the scheme is to make the name 'Alkathene' as much a household word as 'Terylene' has become, and to stop the average housewife from thinking vaguely of all these household goods as "plastic."

Every housewife will be recommended to look for the 'Alkathene' label when buying polythene ware. This label is the mark of the highest-quality polythene goods on sale.

Point-of-sale publicity material, such as counter displays, showcards and window stickers, will be on view in hardware shops and large stores all over the country.

Serving Sister

Miss Irene Davies recently received the news that the Queen has been graciously pleased to sanction her admission as a Serving Sister of the Order of St. John.

Miss Davies has been an Area Staff Officer of the St. John Ambulance Brigade since 1952 and has gained this high honour following 15 years' service with St. John. Joining in July 1939, she became a member of the St. Albans Nursing Division, and during the war years she was a member of the mobile unit first aid team stationed at Osterhills and later at Hill End Hospital.



Miss I. Davies

Following promotion to the rank of officer in 1942 she became Divisional Superintendent in 1947, and was in charge of the St. Albans Division until her appointment as Area Officer.

During the war years she was joint secretary of the local Red Cross and St. John committee which raised money for the Duke of Gloucester's appeal by holding flag days and garden fêtes.

Miss Davies joined Plastics Division in 1942. For a time she worked for Dr. D. K. Harris (Division Medical Officer) and still assists with the practical work of his first aid classes.

WILTON WORKS

Wilton Landmark Condemned

Eston Nab Beacon, a well-known landmark on the hills overlooking the Wilton Site, is shortly to be pulled down and replaced with a building of similar size, using as much of the original stone as possible.

The beacon, which was erected during the Napoleonic wars as a signal station, was in a very dilapidated state when the Company purchased the Wilton estate from Colonel Lawther in 1946. It was put into a safe condition at a cost of over £100, but in the following years it was badly damaged by deliberate acts of vandalism. Its unsafe state, and especially the possible danger from falling



Eston Nab Beacon

masonry, has been causing some concern, and last year I.C.I. offered to make the beacon safe by filling it with concrete and then to transfer it to the custody of the local authorities or the Ministry of Works. The offer was rejected, so it is to be taken down. A bronze plaque giving historic details of the old beacon will be built into the new structure.

Unique Opening for Wilton's Golf Course

A somewhat unusual ceremony took place at the opening of a nine-hole golf course at Wilton: the course was "sown" with balls driven off from the terrace below Wilton Castle.

Mr. P. C. Allen, Fibres Group Director, drove the first ball. This was later recovered and presented to him in a silver cup. At the same time Mr. Allen gave two silver spoons, each over a hundred years old, to the Wilton Golf Section for annual competition. He also promised a trophy for the first player to get a hole in one on the new



The opening ceremony

course. A Stableford competition, pitch and putt and putting competitions followed the opening ceremony.

The president of the Yorkshire Union of Golf Clubs and representatives of local clubs attended the ceremony.

OUR NEXT ISSUE

"An Evolving Britain" is the title of an address delivered recently by Sir Alexander Fleck, Chairman of I.C.I., to the Canadian Club of Montreal. Sir Alexander's wise and balanced summing up of our economic situation deserves a wider audience than that for which it was intended. In it he puts our economic difficulties into proper perspective. The *Magazine* will reprint, almost in full, the text of this address as the leading article in the July issue.

Our colour feature comes from practically the other end of the world—Arizona—where the famous Grand Canyon, a mile deep, is without doubt one of the wonders of the world. A. Gilchrist of Alkali Division describes what it is like to ride a mule into the heart of the Canyon, and illustrates his article with some excellent colour photographs he took at the time.

Lastly, a most amusing piece from E. Broke-Evans of Dyestuffs Division, a son of the famous Evans of the *Broke*. It is called "Ever been Stalking?"

CORRECTION

In the note on the new high-density polythene published on page 123 of our April issue we stated that "the Division intends to establish commercial manufacture, etc." This should have read "the Alkali Division intends," etc.



Italian Adventure

By Judith Baldwin (Dyestuffs Division)

Drawing by Hewison

IT all started on a cold February afternoon at the golf club as my friend E.B. and I were sitting in the lounge gazing out disconsolately at the snow-covered trees and fairways. We watched one or two hopeful golfers, muffled to the eyebrows, pick their way gingerly through the snow towards the first tee, their noses already glowing like little red apples. We both sighed; there was dead silence, broken only by the muttered cursings of four old ladies huddled round the fire playing bridge.

It was then that we decided to go to Italy for our summer holiday. Italy—in June! We were so thrilled we could already see ourselves sipping iced drinks under a striped umbrella, listening to the music of guitars.

Our parents jumped at the idea of our going abroad together. Personally, I think they were rather looking forward to getting rid of us for two whole weeks. We decided to stay in Maderno, a small village on the shores of Lake Garda, a well-known beauty spot. We started our preparations immediately, bookings, checking of passports, currency, shopping, and the thousand and one things that a would-be traveller abroad has to find time for; but in spite of being so busy the days crept by so slowly.

As the weeks passed, so our preparations became more hectic; last-minute purchases to be made and our tickets and currency to be collected from the Travel Agency. As it was the first time abroad on our own, E.B. and I had decided to go with an organised party. It would be safer, we thought, and after all, if we took a dislike to the other members of the party we had still got each other.

At last the great day dawned. Our suitcases had been packed the night before—in point of fact they had been packed and unpacked at least a dozen times before they could be made to fasten. Well, you never know when you might be glad you had decided to pack a thick woolly scarf or a pair of studded hiking boots. Our rail tickets to London had been bought. We were all set.

Our families and friends gathered at the station to see us off (we might have been going on a two years' exploration of the Belgian Congo instead of the Continent for two weeks); and eventually, after two or three false alarms, the train started to move. As it steamed slowly out of the station, E.B. and I sank back in our seats. Our great adventure had begun.

After spending the night in London, we met our fellow travellers at the head office of the agency. We walked casually through the doors, but as soon as we set eyes on the members of our group our hearts sank—they looked pretty crummy and all of them desperately in need of a holiday.

"E.B.," I whispered, "it's going to be terrible having to spend a fortnight with this lot!"

"I shouldn't let it worry you," E.B. whispered back. "They're probably thinking exactly the same about us."

Fortunately, as it happened, they turned out not at all as we first expected and we became very friendly.

The journey to Milan was uneventful. But there was the thrill of ordering dinner (with wine) in a little brasserie at Calais, of breakfasting on coffee, rolls and cherry jam at Basle, and of seeing the beautiful

snow-capped mountains, the green rivers and blue lakes of Switzerland at her very best.

We were met at Lugano by the Maderno representative of the holiday organisation—Louis—who was to be our guide, philosopher and friend for the next two weeks. He shepherded us on and off trains and buses like a middle-aged Brownie mistress, until at last—years, it seemed, after leaving London—we arrived in Maderno—hot, dusty, and very much the worse for wear.

That evening at dinner Louis told us of his plans for the two weeks, of the excursions he had arranged for the daytime and the dances we were to go to in the evening. Louis, it seemed, was rather fond of dancing and was determined that E.B. and I should go with him one evening, as no one else in the party was very interested.

"I bring my friend," he would say, "and we go in his car to the hotel down the road and make a night of it—yes?" Louis' friend, I thought, I'll bet he looks like a cross between Farouk and a bloodhound.

A few days went by and Louis seemed to have forgotten his promise, but at dinner one evening he announced his intention of taking us all to the cinema in the neighbouring village of Toscalano, about half a mile down the road. The film was German, and not a very good one at that. The soundtrack was in Italian, and with my limited knowledge of that language I could not have understood less had it been in Swahili. The programme finished about 11.15 p.m., and as we were on our way back to the hotel Louis suddenly exclaimed: "My friend—over there by the café!" We looked where he was pointing, and there we saw "the friend" standing by his car.

"Well, goodnight, everyone," said Louis. "Come on, you two!" Before we could say Giuseppe Garibaldi we had been introduced to his friend Lorenzo and bundled into the car, and were being driven at breakneck speed along the extremely twisty roads. We had no idea where we were going. E.B. could only think of the hotel Louis had spoken of; but I could think only of the Pearly Gates, through which we were soon surely to pass. We watched with apprehension as the needle on the speedometer crept past the 70, 80, 90 and over the 100 mark. Even the fact that speed on the Continent is measured in kilometres and not in miles was no consolation to us. Moreover, there seemed to be no difficulty about driving on the left- or the right-hand side of the road—Lorenzo just drove down the middle.

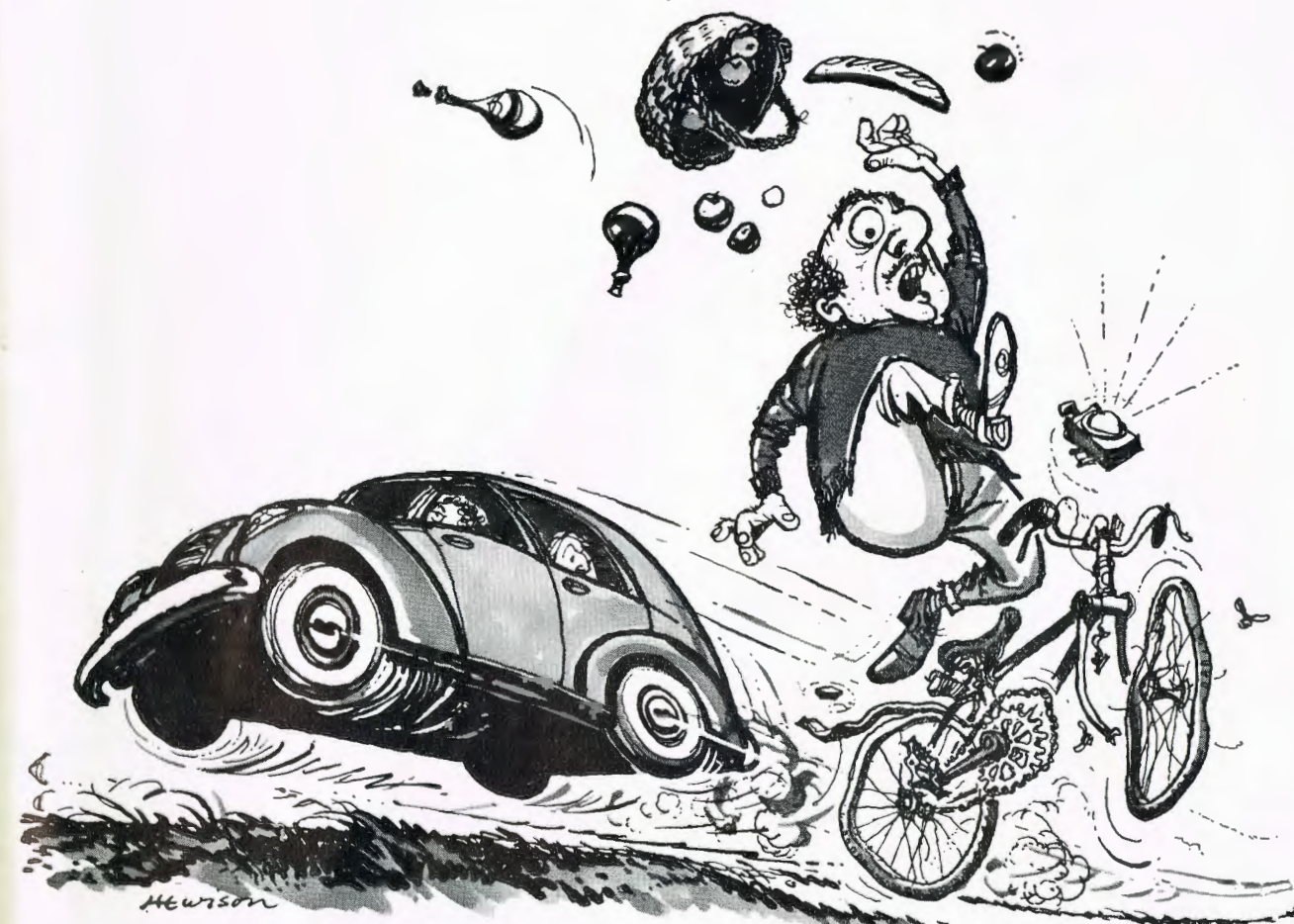
We arrived at Hotel Rimbalzello in one piece, although at times I thought it was going to be a near thing. Lorenzo, who seemed to know the place well, took us past the doormen and through to the patio, where we found a table by the dance floor. Rimbalzello really was a beautiful place—a place one sees in films or reads of in romantic novels but never actually believes to exist. The dance floor was marble, and in the middle was a fountain surrounded by exotic flowers. A few small tables were placed round the floor, and on the open side of the patio was a terrace filled with tables and lit only by fairy lights and lanterns hanging in the palm trees. The stars twinkled high up in the sky, and the light of the moon made a broad ribbon of silver right across the dark lake.

When we first arrived we could hear a guitar strumming in one corner of the patio. The guitarist was tall and fair and did not look in the least Italian. I ventured to say so, but E.B. silenced me by saying scornfully that it was quite possible to find tall fair-haired people in the north of Italy. I was not convinced; in fact, I was prepared to swear he came from Brooklyn.

The guitarist, who spoke with a pronounced (probably cultivated) Continental accent, was wandering among the dancers, playing. Suddenly he spotted our table and moved towards us. He began to sing an Italian song, "Bella Femina." E.B. and I were rather flattered that he should have picked us out of the numbers of Italian women present infinitely more beautiful than we were. All eyes were on our table, and when the song finished a cheer went up for "Le Inglese." I do not vouch for the accuracy of the Italian, but that is what it sounded like to us. By the end of the evening I had discovered that I was quite mistaken in thinking the guitarist came from Brooklyn—it was Yonkers.

Apart from Lorenzo, we made many friends among the villagers, especially the young men who drove our boat; it is not hard for young ladies to make friends in Italy. We used to have a great deal of fun trying to understand each other, for none of us spoke the other's language. We would converse by signs or in a mixture of French, Spanish, Italian and English, not to mention a smattering of German.

The days flew by, and in no time it seemed our holiday was almost over and we had to start thinking about returning home. It was a sad moment for us; we had seen and done so many new and exciting things.



... Lorenzo just drove down the middle of the road

We had been into the Dolomites one day, travelled by chair lift to 6000 ft. and found snow still frozen at the top; we had been to Verona to see the famous Arena and Juliet's Tomb; we had also met Two Gentlemen of Verona who plagued us with questions about ourselves, Sabrina, Sir Anthony Eden, Sabrina, Princess Margaret, and of course Sabrina; we had been arrested for jay-walking and threatened with a fine of a large sum of lire; we had met people of all nationalities except, surprisingly enough, English; we had seen oxen in the streets, women doing their weekly wash in the lake, and priests riding about their parishes on motor scooters.

We did not want to leave Maderno, nor the many new friends we had made; we did not relish the thought of sleeping—or trying to—on the train through France, or of crossing the Channel in a little tub which is tossed about like a cork at the slightest suggestion of a breeze.

The day we left Maderno it was raining and the

rain kept with us all the way to Boulogne; we boarded the steamer only to learn that there was a gale in the Channel. We sat down on a wooden form on the top deck and wrapped ourselves up with tarry and oily mackintoshes kindly provided for us by a sailor in exchange for an out-of-date issue of *Saturday Evening Post*. Then I heard someone say "Oh look, there's Folkestone—we're going into harbour backwards!" I have never been so thankful in my life as when I stepped off that little boat and trod on dry land again.

We passed through Customs fairly easily, and the first thing we did on reaching London was to telephone home (reversed charges).

"Hello, Momma!" I said excitedly, hardly giving my poor mother a chance to get a word in edgewise. "I can hardly wait to get home, but for goodness' sake don't give me spaghetti for supper, I've had just about as much as I can take. I've had a wonderful time and I've so much to tell you. . . ."

